

Remarks

Reconsideration of the application, as previously amended, and allowance of all pending claims are respectfully requested. Claims 1, 3, 5, and 7-24 remain pending.

In the Final Office Action dated January 30, 2004, claims 1, 3, 5, and 7-24 are rejected under 35 U.S.C. §103(a) as being unpatentable over Traversat et al. (U.S. Patent No. 6,119,129 hereinafter, "Traversat") in view of Jiang et al. (U.S. Patent No. 6,453,354; hereinafter, "Jiang"). Applicants respectfully, but most strenuously, traverse this rejection for the reasons stated below.

In one aspect, applicants' invention is directed to multithreaded clients accessing resources of a global data repository. For example, applicants claim a method of managing the locking of resources of a global data repository of a distributed computing environment (e.g., claim 1). The method includes, for instance, issuing a request, via a thread of a multithreaded client application of the distributed computing environment, for a lock of a resource of the global data repository; and obtaining the lock for the thread independent of a threading model of an operating system of the distributed computing environment. The obtaining includes employing a local tree in obtaining the lock, the local tree being local to the client application and having a mount point usable by the client application to lock the resource. The resource is further lockable via another mount point of the local tree or another local tree.

Advantageously, employing local trees allows applications to access a resource (e.g., a table) via a mount point (e.g., directory) of a local tree even though the resource is locked in a global data repository (e.g., global database). Further, the same resource (table) can be mounted and locked through different mount points (directories). For instance, with a global database including Table X, and a local tree including directories A and B, an application can mount and lock Table X through Directory A, and mount and lock Table X through Directory B. Therefore, in this example, Table X is mounted and locked more than once, as if it were two different resources.

The use of a local tree is recited in applicants' claimed invention. For example, applicants' claim 1 includes a local tree that is local to a client application and has a mount point usable by the client application to lock a resource, the resource also being lockable via another mount point of either that local tree or another local tree. While applicants agree that Traversat does not teach or suggest "wherein said obtaining comprises employing a local tree in obtaining said lock, said local tree being local to the client application and having a mount point usable by the client application to lock said resource, and wherein said resource is further lockable via another mount point of one of said local tree and another local tree," applicants respectfully disagree that these aspects of the claimed invention are taught or suggested by Jiang. In particular, applicants respectfully submit that Jiang also fails to teach or suggest these aspects of applicants' claimed invention.

In general, Jiang describes a method of operating a data mover computer using a connection-oriented protocol for permitting a client to access a file system (col. 3, lines 59-62). In particular, the cited portion of Jiang describes a two-level locking scheme for obtaining file locks (col. 27, lines 23-34) in a networked computing environment wherein data mover computers are employed to service client access requests to file systems (col. 3, line 59 to col. 4, line 2).

There is a significant difference between the claimed invention and the acquisition of file locks described in Jiang. As recited in applicants' claim 1, obtaining a lock for a resource "comprises employing a local tree in obtaining said lock, said local tree being local to the client application." In contrast, the local tree described in Jiang is a file system of an operating system, not the client application making the request for a lock. That is, Jiang describes utilizing the file system (i.e. local tree) of the operating system in acquiring a lock on a file. An operating system is not a client application. Thus, the local tree is not local to the client application, as claimed by applicants.

Moreover, claim 1 recites obtaining the lock for a thread of "a multi-threaded client application". In Jiang, the lock is being acquired for the operating system. It is well known that an operating system is not multi-threaded. Thus, applicants respectfully submit that Jiang does

not teach or suggest a "multi-threaded client application." Since Jiang fails to teach or suggest at the very least a local tree local to a multi-threaded client application, features which are also missing from Traversat, applicants respectfully submit that the combination of Traversat and Jiang proposed in the final Office Action fails to teach or suggest at least "employing a local tree in obtaining said lock, said local tree being local to the multithreaded client application."

In addition, applicants respectfully submit that the final Office Action does give a proper motivation to combine the teachings of Traversat and Jiang. For example, Traversat explicitly avoids the use of trees local to client applications at col. 4, lines 10-16:

In the described embodiment, data relating to client machine and user configuration in a network is stored in on [sic] a server as part of a server JSD. The configuration information for each client, also referred to as subsystem, is stored in the server schema. This is in contrast to conventional networks where configuration information regarding a client is hardcoded or stored on the client machine.

Because Traversat teaches away from using local trees, there would have been no motivation to combine Traversat with Jiang's teaching of using a local tree of the data mover computer's operating system in acquiring a lock on a file. Applicants respectfully assert that the Examiner is improperly using hindsight reconstruction as the motivation for combining the cited prior art.

Thus, applicants respectfully submit that the combination of Traversat and Jiang proposed in the final Office Action fails to teach or suggest at least one element of the claimed invention as recited in claim 1, and applicants also respectfully submit that the final Office Action does not provide a proper motivation for combining Traversat and Jiang.

For all the reasons stated above, applicants respectfully submit that claim 1, as well as claims 3 and 5, include at least one feature not described, taught or suggested by the proposed combination of Traversat and Jiang. Applicants believe that dependent claims 7-24 are allowable for the same reasons as the independent claims, as well as for their own additional features. Based on the foregoing, applicants respectfully submit that the claimed invention is not

obvious based on the proposed combination, and, therefore, request an indication of allowability for all pending claims.

Should the Examiner wish to discuss this case with applicants' attorney, please contact applicants' attorney at the below listed number.

Respectfully submitted,

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